CS74–39
Wall-Paneling; Solid-Hardwood

U. S. DEPARTMENT OF COMMERCE
HARRY L. HOPKINS, Secretary
NATIONAL BUREAU OF STANDARDS
LYMAN J. BRIGGS, Director

SOLID HARDWOOD WALL PANELING

COMMERCIAL STANDARD CS74–39

Effective Date for New Production
from May 20, 1939

A RECORDED STANDARD OF THE INDUSTRY

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PROMULGATION

of

COMMERCIAL STANDARD CS74–39

for

SOLID HARDWOOD WALL PANELING

On October 26, 1938, a group of nine interested hardwood associations requested that a commercial standard be established for solid hardwood wall paneling. Following several preliminary manufacturers' meetings, a manufacturers' conference was held in Memphis, Tenn., on December 15, 1938. The recommended standard was then submitted to a number of manufacturers and distributor and consumer organizations for comment, and was later circulated to the industry for written acceptance. The industry has since accepted and approved for promulgation by the United States Department of Commerce, through the National Bureau of Standards, the standard as shown herein.

The standard is effective for new production from May 20, 1939.

Promulgation recommended.

I. J. Fairchild,
Chief, Division of Trade Standards.

Promulgated.

Lyman J. Briggs,
Director, National Bureau of Standards.

Promulgation approved.

Harry L. Hopkins,
Secretary of Commerce.

SOLID HARDWOOD WALL PANELING

COMMERCIAL STANDARD CS74–39

PURPOSE

1. The purpose of this standard for solid hardwood wall paneling is (*a*) to provide a common basis for the manufacture, distribution, and use of this material; (*b*) to simplify the procurement of standard sizes and patterns to the benefit of all concerned; (*c*) to permit the combining of various species; and (*d*) to make possible the interchange of products from various producing units and regions, thus broadening the field of application for solid hardwood wall paneling.

2. A further purpose is to provide architects, contractors, jobbers, and all those industries and individuals interested in the building trades a standardized product, available both to them and the consuming public through the usual channels of distribution.

3. The use of solid hardwood wall paneling, produced in accordance with this standard, will make this product of nature an agency for increasing the esthetic values of interior decoration; will make for quality, economy, and durable construction; and will be of further economic importance as a forest conservation measure by providing a means for the broader utilization and appreciation of wood.

SCOPE

4. This standard provides for two classes of ¾-in. solid hardwood wall paneling manufactured to standard tongued-and-grooved patterns, in six face widths from 3 to 8 in., available in seven exact lengths from 2 ft 6 in. to 8 ft 8 in. It also covers random lengths of 2 ft. and up on 6-in. breaks and harmonizing molding and trim patterns.

GENERAL REQUIREMENTS

5. All solid hardwood wall paneling and trim sold as conforming to this commercial standard shall be properly manufactured in accordance with the following requirements:

6. *Seasoning and care.*—Material shall be kiln-dried, according to accepted methods for the species in question, to a proper and uniform moisture content before it is machined, and thereafter shall be protected to prevent the absorption of moisture.

7. *Workmanship.*—All paneling and trim shall be of good workmanship, uniform thickness, and manufactured in accordance with good mill practice. Machining imperfections which can be eliminated by hand sanding shall be permitted. The face side of all flat surfaces shall be sanded smoothly.

8. *Bundling.*—This material shall be wrapped or packaged to prevent moisture absorption and other damage.

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DETAIL REQUIREMENTS

9. Solid hardwood wall paneling and trim shall be classified according to the face side from the following descriptions, which set forth the minimum requirements:

10. *Character marked.*—This classification covers material for applications in which the surface displays various character markings inherent in the tree, reflecting the natural beauty of hardwood, including knots; worm holes and worm grooves; swirls, burls, and other grain irregularities; stain, spots, mineral streaks, and other color variations occurring in the growth of the wood. It shall be free of rot and decay.

11. *Conventional.*—This classification covers paneling material intended for the more formal effects and designs. Variations in color due to growth of wood shall be admitted, together with the natural configurations, but knots over ⅛ in. in diameter, worm holes, and grub holes are not permitted in this classification.

12. *Patterns.*—Paneling, molding, and trim shall be machined in accordance with the approved patterns and dimensions indicated in figures 1 to 10. All tongues and grooves shall conform accurately to dimensions shown in figures 1, 2, 3, 4, and 5.

13. *Thickness.*—The standard thickness of hardwood wall paneling, when machined, shall be $^{25}/_{32}$ in. Base and frieze board members shall be 1$^{1}/_{16}$ in. After sanding the paneling, the thickness shall be approximately $^{1}/_{32}$ in. less.

14. *Width.*—Paneling shall be furnished in widths of 3, 4, 5, 6, 7, and 8 in. face size. Moldings shall be in widths indicated on patterns (1⅛- and 1½-in. face size).

15. *Length.*—Solid hardwood wall paneling and molding shall be furnished in seven lengths, 2 ft 6 in., 5 ft 6 in., 6 ft, 6 ft 6 in., 7 ft 8 in., 8 ft 2 in., and 8 ft 8 in., as specified, normally used for vertical application to conform to the design effects shown with this standard and for ceiling heights ranging from 8 to 9 ft, inclusive, and also for the use of chair-rail-height paneling. Paneling and molding shall also be furnished in random lengths of 2 ft and up, to average not less than 6 ft, normally used for horizontal application. Paneling may be either end-matched or have the ends trimmed square. Trim shall be in random lengths of 6 ft and up, to average not less than 8 ft.

16. *Reverse face.*—This may be flat-back, grooved, or hollow-back at the discretion of the manufacturer, for the reason that properties peculiar to each species of hardwood make the same treatment of all inadvisable or unnecessary.

MEASUREMENT

17. The measurement of solid hardwood wall paneling shall be computed on the basis of square feet, surface measure. Trim and molding shall be measured on a linear-foot basis.

INSPECTION

18. All solid hardwood wall paneling sold as conforming to the commercial standard is subject to inspection in the condition as received and complaints regarding any shipment shall be made within five (5) days after receipt thereof. Any rejected material shall be held intact

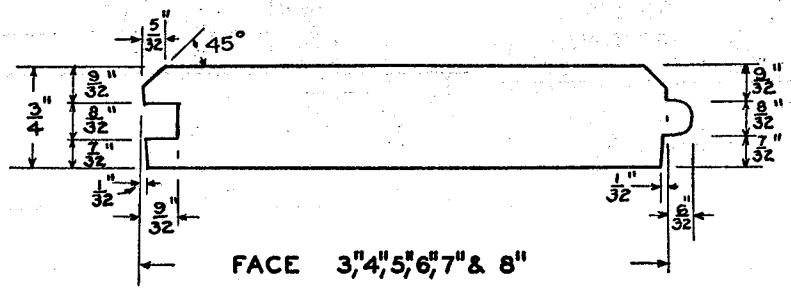

FIGURE 1.—*Vertical or horizontal panel detail.*

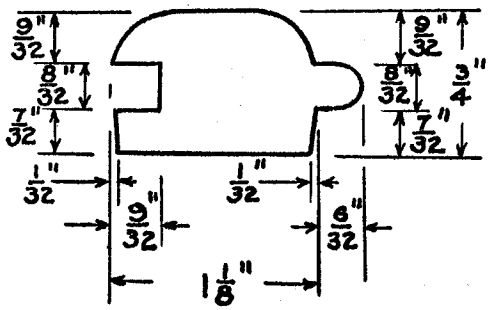

FIGURE 2.—*Vertical or horizontal mold detail.*

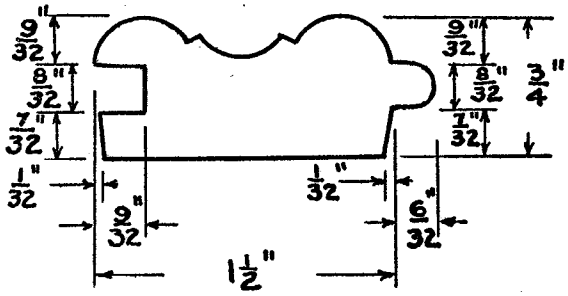

FIGURE 3.—*Vertical or horizontal mold detail.*

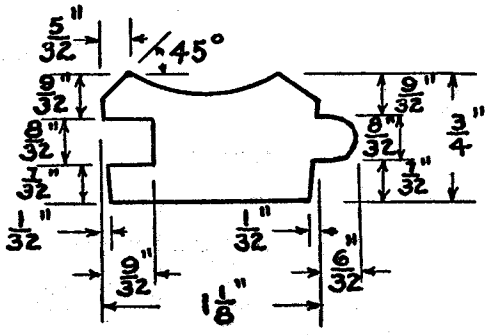

FIGURE 4.—*Vertical or horizontal mold detail.*

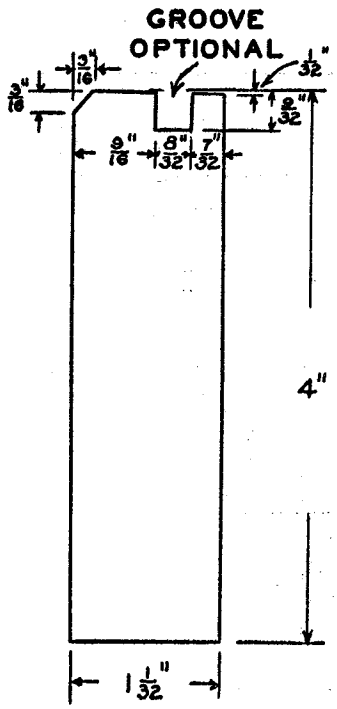

FIGURE 5.—*Base and frieze detail.*

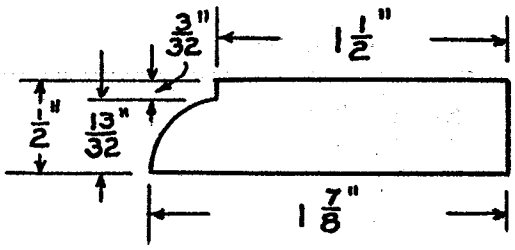

FIGURE 7.—*Stop and apron detail.*

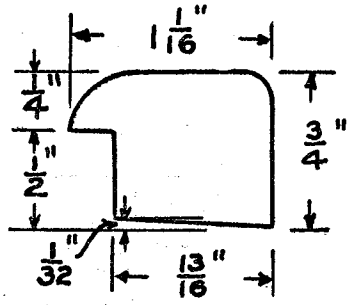

FIGURE 8.—*Chair-rail and back-band detail.*

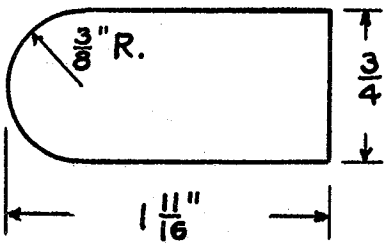

FIGURE 9.—*Chair-rail detail.*

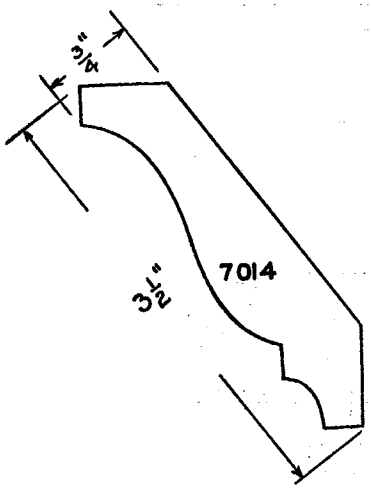

FIGURE 6.—*Cornice detail.*

Number on section refers to the 7000 Series Standard Wood Moldings.

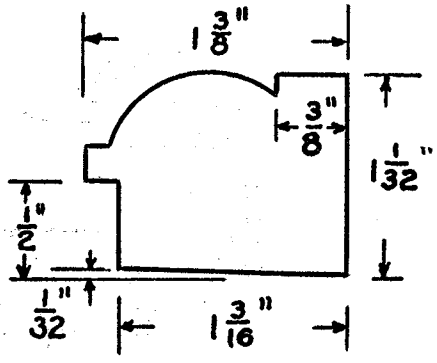

FIGURE 10.—*Back-band detail.*

in its original form, properly protected, for a period up to three (3) weeks after notice of rejection and pending adjustment.

RECOMMENDED COMBINATIONS

19. *Installation effects.*—The paneling is designed to meet the wide range of interior requirements and also to satisfy the individual tastes and preferences of builders. Paneling manufactured in accordance with the standards herein set forth offers builders the choice of 12 distinct effects and many variations therefrom: (*a*) Vertical wainscot to chair-rail height (36 in. or less from finished floor), with or without moldings (see fig. 17); (*b*) horizontal wainscot to chair-rail height, with or without moldings (see fig. 18); (*c*) vertical to ceiling height, consisting of one-piece panel boards, with or without moldings (see fig. 19); (*d*) vertical to ceiling height, consisting of wainscot members and longer panel boards, separated by chair rail, with or without moldings (not shown); (*e*) horizontal to ceiling height, with or without moldings (not shown); and (*f*) horizontal wainscot and vertical upper portion, with or without moldings (see fig. 20).

20. *Trim.*—Hardwood trim consisting of suitable base and cornice members, chair-rail moldings, window and door trim, and panel strips, as illustrated in this standard, are strongly recommended. Other trim patterns can be substituted if such patterns harmonize architecturally with the design of the solid hardwood paneling.

CERTIFICATION

21. In order to assure the purchaser that he is getting solid hardwood wall paneling and trim of the quality specified, the producers may individually, or in concert with their trade association, issue certificates of classification for specific shipments, or grade and trade-mark each piece or bundle as conforming to the established standard. The following wording is recommended for such certificates:

> This SOLID HARDWOOD WALL PANELING AND TRIM
>
> ---------- (Classification) ---------- (Species)
>
> has been manufactured by a member of the ---------- MANUFACTURERS ASSOCIATION and is guaranteed to conform to Commercial Standard CS74–39, issued by the National Bureau of Standards of the U. S. Department of Commerce.
>
> ---------- (Name of manufacturer)

SPECIES

Solid hardwood wall paneling is made in the following species among others:

Alder	Elm	Oak, red
Ash	Gum, black	Oak, white
Aspen	Gum, red	Pecan
Beech	Gum, sap	Poplar
Birch	Hackberry	Sycamore
Buckeye	Hickory	Tupelo
Butternut	Magnolia	Walnut
Cherry	Mahogany	Willow
Chestnut	Maple	

TABLE 1.—*Sizes of hardwood wall paneling and trim, "Character-Marked" and "Conventional"*

Item	Figure No.	Thickness	Width	Length	
				Specified	Random
		Inches	*Inches*		
Back band	10	1 1/32	1 3/8		6 ft. and up—avg. 8 ft.
Base	5	1 1/32	4		6 ft. and up—avg. 8 ft.
Chair rail and back band.	8	3/4	1 1/16		6 ft. and up—avg. 8 ft.
Chair rail	9	3/4	1 1/16		6 ft. and up—avg. 8 ft.
Cornice	6	3/4	3 1/2		6 ft. and up—avg. 8 ft.
Frieze	5	1 1/32	4		6 ft. and up—avg. 8 ft.
Molding	2 and 4	3/4	1 1/8	2'6", 5'6", 6', 6'6", 7'8", 8'2", and 8'8".	2 ft. and up—avg. 6 ft.
Molding	3	3/4	1 1/2	2'6", 5'6", 6', 6'6", 7'8", 8'2", and 8'8".	2 ft. and up—avg. 6 ft.
Paneling	1	3/4	3, 4, 5, 6, 7, and 8.	2'6", 5'6", 6', 6'6", 7'8", 8'2", and 8'8".	2 ft. and up—avg. 6 ft.
Stop and apron	7	1/2	1 7/8		6 ft. and up—avg. 8 ft.

NOMENCLATURE AND DEFINITIONS

Burl.—A swirl or twist in the grain of the wood which occurs near a knot but does not contain a knot over 1/8 in. in diameter.

Decay.—A disintegration of the wood substance due to the action of wood-destroying fungi. The words "dote" and "rot" mean the same as decay.

Hardwoods.—The botanical group of trees that, with a few exceptions, comprise all the broadleaved species. The term has no reference to the actual hardness of the wood. Angiosperms is the botanical name for hardwoods.

Kiln-dried.—Dried by artificial heat to a moisture content which is less than can normally be obtained through the natural process commonly known as air seasoning.

Knot.—A branch or limb embedded in the tree which has been cut through in the process of manufacture.

Moisture content of wood.—Weight of the water contained in the wood, expressed in percentage of the weight of the oven-dry wood.

Rot.—(See *Decay.*)

Seasoning.—Removing moisture from wood in order to improve its serviceability.

Spots or streaks.—A discoloration caused by an accumulation of gumlike substance or chemical changes, as a small patch or streak, within the wood.

Stain.—A discoloration, occurring on or in wood, of any color other than the natural color of the piece on which it appears.

Stain, blue.—A bluish or grayish discoloration of the sapwood, caused by the growth of certain moldlike fungi on the surface and in the interior of the piece before kiln drying; made possible by the same conditions that favor the growth of other fungi.

Stain, brown.—A rich brown to deep chocolate brown discoloration of the sapwood, caused by a fungus that acts similarly to the blue-stain fungus.

Stain, chemical brown.—A chemical discoloration of wood, which sometimes occurs during the air-drying or the kiln-drying of several species, usually caused by the oxidation of extractives.

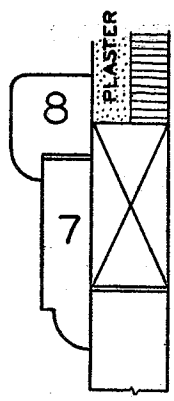

FIGURE 11.—*Chair-rail section.*
Numbers on sections refer to detail figures.

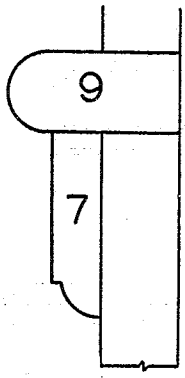

FIGURE 12.—*Chair-rail section.*
Numbers on sections refer to detail figures.

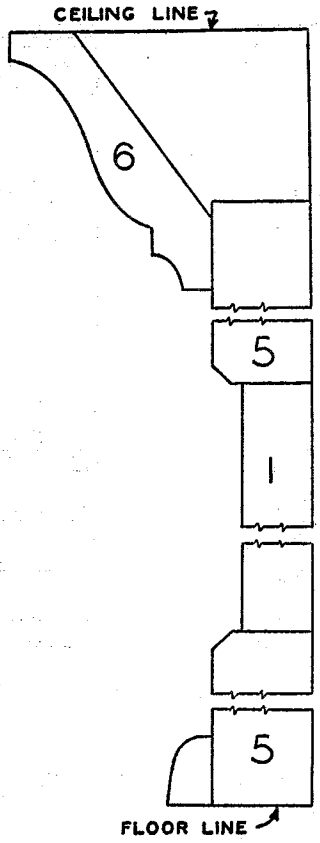

FIGURE 13.—*Section—ceiling to floor.*
Numbers on sections refer to detail figures.

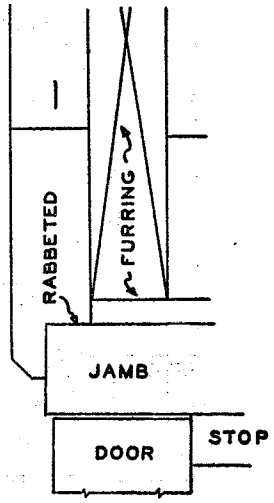

FIGURE 14.—*Door-head section (plain).*
Numbers on sections refer to detail figures.

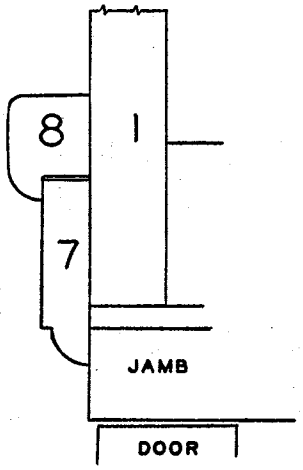

FIGURE 15.—*Door-head section.*
Numbers on sections refer to detail figures.

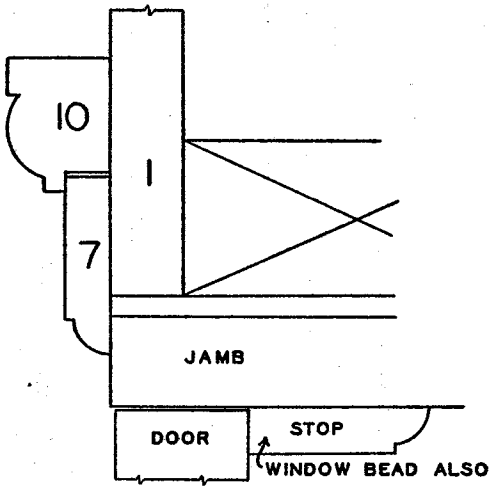

FIGURE 16.—*Door-head section.*
Numbers on sections refer to detail figures.

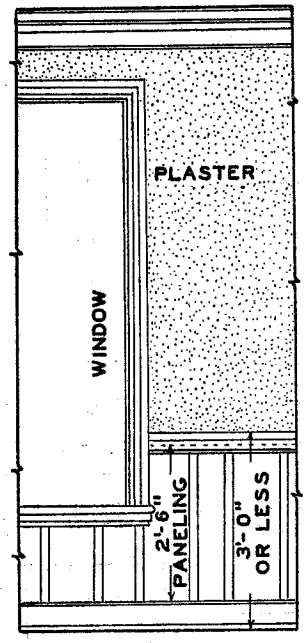

FIGURE 17.—*Vertical paneling cut for 36-in. height of chair rail.*

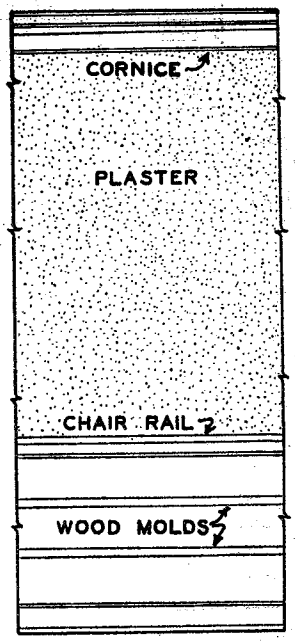

FIGURE 18.—*Horizontal paneling to chair rail.*

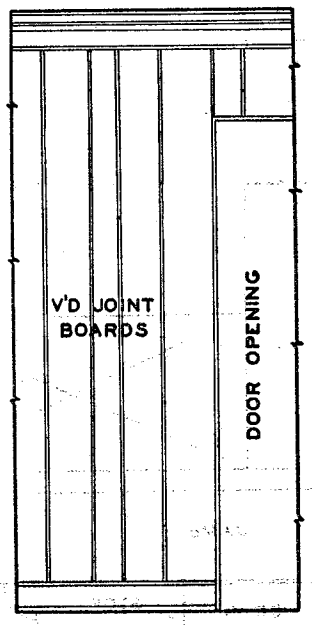

FIGURE 19.—*Vertical paneling to ceiling.*

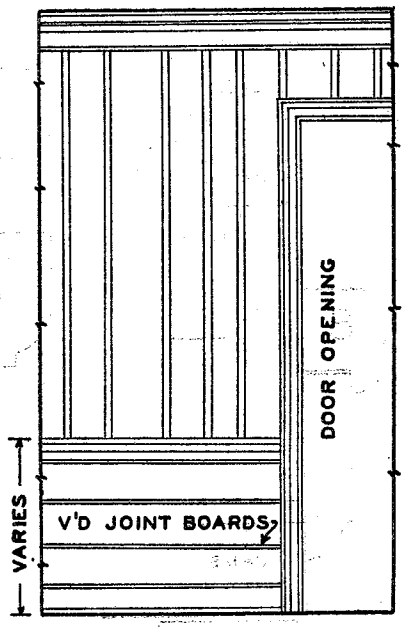

FIGURE 20.—*Horizontal paneling to chair rail, vertical above.*

Stain, sap.—(See *Stain, blue.*)

Worm holes (worm grooves, grub holes, etc.).—Voids in the wood caused by the burrowing action of certain wood-infesting worms which, of course, do not survive the kiln-drying process.

EFFECTIVE DATE

The standard is effective for new production from May 20, 1939.

STANDING COMMITTEE

The following comprises the membership of the standing committee, which is to review, prior to circulation for acceptance, revisions proposed to keep the standard abreast of progress. Each association nominated its own representatives. Comment concerning the standard and suggestions for revision may be addressed to any member of the committee or to the Division of Trade Standards, National Bureau of Standards, which acts as secretary for the committee.

Manufacturers:

National Hardwood Lumber Association:
J. W. McClure (chairman), 2408 Buckingham Bldg., Chicago, Ill.

Appalachian Hardwood Manufacturers, Inc.:
H. E. Everley, 414 Walnut Street, Cincinnati, Ohio.

Hardwood Dimension Manufacturers Association:
H. D. Florence, Atlanta Oak Flooring Co., 920 Glenwood Avenue, SE., Atlanta, Ga.

Northern Hemlock and Hardwood Manufacturers Association:
Harold S. Crosby, Oshkosh, Wis.

Southern Hardwood Producers, Inc.:
F. W. Girdner, Bradley Lumber Sales Co., Warren, Ark.

Distributors:

Central Ohio Lumber Institute:
J. E. Stewart, The J. H. Zinn Lumber Co., 19 East Hudson St., Columbus, Ohio.

National-American Wholesale Lumber Association:
Dwight Hinckley, The Dwight Hinckley Lumber Co., Cincinnati, Ohio.

National Lumber Dealers Association:
Invited to appoint representative.

Northwestern Lumbermen's Association:
Invited to appoint representative.

Southwestern Lumbermen's Association:
Invited to appoint representative.

Users:

The American Institute of Architects:
Invited to appoint representative.

Federal Housing Administration:
E. W. Macy, Washington, D. C.

National Association of Builders Exchanges:
Invited to appoint representative.

National Association of Building Owners and Managers:
Invited to appoint representative.

National Association of Purchasing Agents:
L. S. Clark, Twin City Hardwood Lumber Co., St. Paul, Minn.

HISTORY OF PROJECT

On October 26, 1938, the American Walnut Manufacturers Association; Appalachian Hardwood Manufacturers, Inc.; Hardwood Dimension Manufacturers Association; Mahogany Association, Inc.; National Hardwood Lumber Association; Northeastern Lumber Manufacturers Association; Northern Hemlock and Hardwood Manufacturers Association; Philippine Mahogany Manufacturers Import Association; and Southern Hardwood Producers, Inc., representing

the hardwood lumber industry, requested the cooperation of the National Bureau of Standards in the establishment of a commercial standard for solid hardwood wall paneling.

After several preliminary meetings, a tentative draft of the standard was submitted to manufacturers and interested distributor and consumer organizations for review and comment. After considering the suggestions received and adjusting the draft so that it represented the composite views of all interested groups, the recommended commercial standard was circulated on March 6, 1939, to the industry for acceptance.

Following acceptance by a large majority of producers and many distributors, users, and architects, and in the absence of active opposition, the standard was promulgated as Commercial Standard CS74–39, effective for new production, May 20, 1939.

CS74–39

ACCEPTANCE OF COMMERCIAL STANDARD

This sheet properly filled in, signed, and returned will provide for the recording of your organization as an acceptor of this commercial standard.

Date _____

Division of Trade Standards,
National Bureau of Standards,
Washington, D. C.

Gentlemen:

Having considered the statements on the reverse side of this sheet, we accept the Commercial Standard CS74–39 as our standard of practice in the

Production [1] Distribution [1] Use [1]

of solid hardwood wall paneling.

We will assist in securing its general recognition and use and will cooperate with the standing committee to effect revisions of the standard when necessary.

Cut on this line

Signature of individual officer _____
(In ink)

(Kindly typewrite or print the following lines)

Name and title of above officer _____

Company _____
(Fill in exactly as it should be listed in pamphlet)

Street address _____

City and State _____

[1] Please designate which group you represent by drawing lines through the other two. Please file separate acceptances for all subsidiary companies and affiliates which should be listed separately as acceptors. In the case of related interests, trade papers, colleges, etc., desiring to record their general approval, the words "in principle" should be added after the signature.

TO THE ACCEPTOR

The following statements answer the usual questions arising in connection with the acceptance and its significance:

1. *Enforcement.*—Commercial standards are commodity specifications voluntarily established by mutual consent of the industry. They present a common basis of understanding between the producer, distributor, and consumer and should not be confused with any plan of governmental regulation or control. The United States Department of Commerce has no regulatory power in the enforcement of their provisions; but, since they represent the will of the industry as a whole, their provisions through usage soon become established as trade customs, and are made effective through incorporation into sales contracts by means of labels, invoices, and the like.

2. *The acceptor's responsibility.*—The purpose of commercial standards is to establish for specific commodities, nationally recognized grades or consumer criteria, and the benefits therefrom will be measurable in direct proportion to their general recognition and actual use. Instances will occur when it may be necessary to deviate from the standard and the signing of an acceptance does not preclude such departures; however, such signature indicates an intention to follow the commercial standard where practicable, in the production, distribution, or consumption of the article in question.

3. *The Department's responsibility.*—The major function performed by the Department of Commerce in the voluntary establishment of commercial standards on a Nation-wide basis is fourfold: First, to act as an unbiased coordinator to bring all branches of the industry together for the mutually satisfactory adjustment of trade standards; second, to supply such assistance and advice as past experience with similar programs may suggest; third, to canvass and record the extent of acceptance and adherence to the standard on the part of producers, distributors, and users; and fourth, after acceptance, to publish and promulgate the standard for the information and guidance of buyers and sellers of the commodity.

4. *Announcement and promulgation.*—When the standard has been endorsed by companies representing a satisfactory majority of production, the success of the project is announced. If, however, in the opinion of the standing committee of the industry or the Department of Commerce, the support of any standard is inadequate, the right is reserved to withhold promulgation and publication.

ACCEPTORS

The organizations and individuals listed below have accepted this standard as their standard of practice in the production, distribution, and use of solid hardwood wall paneling. Such endorsement does not signify that they may not find it necessary to deviate from the standard, nor that producers so listed guarantee all of their products to conform with the requirements of this standard. Therefore, specific evidence of quality certification should be obtained where required.

ASSOCIATIONS

American Specification Institute, Chicago, Ill.
American Walnut Manufacturers Association, Chicago, Ill.
Appalachian Hardwood manufacturers, Inc., Cincinnati, Ohio.
Central Ohio Lumber Institute, Columbus, Ohio.
Douglas Fir Plywood Association, Tacoma, Wash. (In principle.)
Hardwood Dimension Manufacturers Association, Louisville, Ky.
Mahogany Association, Inc., Chicago, Ill.
National-American Wholesale Lumber Association, Inc., New York, N. Y.
National Hardwood Lumber Association, Chicago, Ill.
National Oak Flooring Manufacturers Association, Memphis, Tenn.
North West Woodwork Association, St. Paul, Minn. (In principle.)
Northeastern Lumber Manufacturers Association, Inc., New York, N. Y.
Northern Hemlock & Hardwood Manufacturers Association, Oshkosh, Wis.
Philippine Mahogany Manufacturers' Import Association, Inc. Los Angeles, Calif.
Southern Cypress Manufacturers Association, Jacksonville, Fla. (In principle.)
Southern Hardwood Producers, Inc., Memphis, Tenn. (In principle.)
Wisconsin Retail Lumbermen's Association, Milwaukee, Wis.

FIRMS

Allison & Allison, Los Angeles, Calif.
American Lumberman, Chicago, Ill. (In principle.)
Andrews, Jones, Biscoe & Whitmore, Boston, Mass.
Atlanta Oak Flooring Co., Atlanta, Ga.
Atlas Lumber Co., The, Cincinnati, Ohio.
Augusta Hardwood Co., Augusta, Ga.
Bailey Lumber Co., Bluefield, W. Va.
Barnaby, Chas. H., Greencastle, Ind.
Beacham & LeGrand, Greenville, S. C. (In principle.)
Bennett Bailey Lumber Co., Minneapolis, Minn.
Bertrand Walnut Co., Springfield, Mo.
Bial, George F., Hasbrouck Heights, N. J.
Bickford, Robert T., Elmira, N. Y.
Bishop, Horatio W., Los Angeles, Calif. (In principle.)
Black Lumber Co., J. W., Corning, Ark.
Bliss & Van Auken Lumber Co., Saginaw, Mich.
Blithe, Wesley Lesher, Philadelphia, Pa.
Bogner, Harry, Milwaukee, Wis.
Booth & Boyd Lumber Co., Saginaw, Mich.
Bradley Lumber Co. of Arkansas, Warren, Ark.
Brainerd, Harry B., New York, N. Y. (In principle.)
Braseth & Houkom, Fargo, N. Dak.
Brazer, Clarence W., New York, N. Y.
Briggs Lumber & Manufacturing Co., Chas. A., Scottdale, Pa.
Bringardner Lumber Co., Lexington, Ky.
Bristol Door & Lumber Co., Bristol, Tenn.
Brown, Floyd W., Minneapolis, Minn.
Brown Dimension Co., Manistique, Mich.
Brust, Peter, Milwaukee, Wis.
Buechner & Orth, St. Paul, Minn. (In principle.)
Buffalo Plywood Corporation, Buffalo, N. Y.
Buffelen Lumber & Manufacturing Co., Tacoma, Wash.

Builders Woodwork Co., Burlington, Iowa.
Building Service, Inc., Great Falls, Mont.
Candela, Rosario, New York, N. Y.
Carder, Macon O., Amarillo, Tex.
Carroll, John, Atlantic City, N. J.
Cathey-Flack Hardwoods, Inc., Montgomery, Ala.
Central Pennsylvania Lumber Co., Sheffield, Pa.
Chapin, Rollin C., Minneapolis, Minn. (In principle.)
Chapin Lumber Co., The, Aurora, Colo.
Charleston Lumber Co., Charleston, W. Va.
Charlottesville Lumber Co., Inc., Charlottesville, Va.
Chattanooga Sash & Millwork Co., Chattanooga, Tenn.
Cherry River Boom & Lumber Co., Philadelphia, Pa.
Child, Harry Charles, Sayre, Pa.
Coit, E., New York, N. Y.
Combs Lumber Co., Inc., Lexington, Ky.
Connor Lumber & Land Co., Marshfield, Wis.
Conrad & Cummings, Binghamton, N. Y.
Conrow, H. S., Wichita, Kans.
Cooper, W. E., Los Angeles, Calif.
Crane Co., The Arthur D., Sparta, N. J.
Crossett Lumber Co., Crossett, Ark.
Cuthbert & Cuthbert, Ann Arbor, Mich.
Daniel, Jr., J. E., Malvern, Ark.
Davis Hardwood Co., San Francisco, Calif.
Deal-Curtis Lumber Co., Drifton, Fla.
DeJarnette, Charles W., Des Moines, Iowa.
Derrick & Gamber, Inc., Detroit, Mich. (In principle.)
DeSoto Hardwood Flooring Co., Memphis, Tenn.
Disbrow & Co., Cheyenne, Wyo.
Dodge & Morrison, New York, N. Y.
Donovan, John J., Berkeley, Calif. (In principle.)
Dryden, Allen N., Kingsport, Tenn.
Duquesne Lumber Co., Inc., Pittsburgh, Pa.
Dykes Lumber Co., New York, N. Y.
Eaton Lumber Mfg. Co., Forest, Maine.
Elliott Hardwoon Co., Inc., Potsdam, N. Y.
Elsasser, Fred A., Union, N. J.
Emery Industries, Inc., Cincinnati, Ohio.
English, Harold T., Hutchinson, Kans.
Estes Lumber Co., Birmingham, Ala.
Farrin Lumber Co., M. B., Cincinnati, Ohio.
Ferguson Lumber Co., W. T., St. Louis, Mo.
Flanagan, Eric G., Henderson, N. C.
Flint & Broad, Dallas, Tex.
Folse, Edgar P., New Iberia, La.
Foltz & Son, Herbert, Indianapolis, Ind.
Forsblom, Ed, Wichita, Kans.
Forsyth Hardwood Co., San Francisco, Calif.
Freiberg Mahogany Co., The, Cincinnati, Ohio.
Frey Planing Mill Co., The, Louisville, Ky.
Frost Lumber Industries, Inc., Shreveport, La.
Fry Fulton Lumber Co., St. Louis, Mo.
Fuller, Robert K., Denver, Colo.
Gall, Harry L. C., New York, N. Y.
Gamble Brothers, Inc., Louisville, Ky.
General Millwork Corporation, Utica, N. Y.
Gibb, Arthur N., Ithaca, N. Y. (In principle.)
Gilchrist, Edmund B., Philadelphia, Pa.
Ginter-Wardein Co., Alton, Ill.
Grand Rapids Store Equipment Co., Grand Rapids, Mich.
Gribben, J. Upton, Columbus, Ohio.
Griffith Lumber Co., Inc., Huntington, W. Va.
Grissom-Rakestraw Lumber Co., Burnside, Ky.
Hallberg & Beersman, Chicago, Ill.
Hampden Lumber Co., Springfield, Mass.
Hanna Corporation, The, Tulsa, Okla.
Hannaford & Sons, Samuel, Cincinnati, Ohio.
Harper & West, Boston, Mass.
Hawkins Lumber & Warehouse Co., Boston, Mass.
Helfensteller, Hirsch & Watson, St. Louis, Mo.
Hendryx, Thos. K., Bradford, Pa.
Henrich's Sons Co., Wm., Buffalo, N. Y.
Hillyer Deutsch Edwards, Inc., Oakdale, La.
Hodgdon & Son, Charles, Chicago, Ill.
Hoit, Price & Barnes, Kansas City, Mo.
Hoke, Karl B., Toledo, Ohio.
Holden, McLaughlin & Associates, New York, N. Y.
Holsman & Holsman, Chicago, Ill.
Hopkins, Albert Hart, Buffalo, N. Y.
Hunter Lumber Co., Chillicothe, Ill.
Illinois, University of, Department of Architecture, Urbana, Ill. (In principle.)
Johnson Lumber Co., Inc., Charles, Rochester, N. Y.
Jones Hardwood Co., San Francisco, Calif.
Jones Lumber Co., J. M., Natchez, Miss.
Keich & O'Brien, Warren, Ohio.
Kilpatrick Brothers, Inc., Oklahoma City, Okla.
Knighton & Howell, Portland, Oreg.

Kohn, Robert D., & Chas. Butler, New York, N. Y.
Korn Co., The, Sumter, S. C.
Kyle, Herbert S., Charleston, W. Va.
Larrick, Tom, Lawrence, Kans.
Lawrence, Holford & Allyn, Portland, Oreg.
Learned & Son, R. F., Natchez, Miss.
Lee, Edward B., Pittsburgh, Pa. (In principle.)
Lehman Co. of America, Jackson, Miss.
Lewis Lumber Co., Asbury Park, N. J.
Liberty Lumber & Manufacturing Co., Inc., Erwin, Tenn.
Lightsey Brothers, Miley, S. C.
Link-Newcomb Mill & Lumber Co., Tchula, Miss.
Lockman, Frederick V., Seattle, Wash.
Loeb, Laurence M., White Plains, N. Y.
Long-Bell Lumber Co., The, DeRidder, La., and Kansas City, Mo.
Lounsbury & McCrory Lumber Co., Chicago, Ill.
Lundeen & Hilfinger, Bloomington, Ill.
Lyman-Hawkins Lumber Co., The, Akron, Ohio.
Mabrey, George R., New York, N. Y.
MacLea Lumber Co., Baltimore, Md.
MacConnell, Inc., Malcolm, St. Louis, Mo.
Mann & Co., Hutchinson, Kans.
Mansfield Hardwood Lumber Co. of Louisiana, Inc., Shreveport, La.
Maris Plywood Corporation, San Francisco, Calif.
Markland Contracting Co., M. B., Atlantic City, N. J.
Martin & Son, A. Oscar, Doylestown, Pa.
Mason & Co., George D., Detroit, Mich.
Mason & Sons, Inc., A., Peru, N. Y.
McCracken & McCall, Inc., Lexington, Ky. (In principle.)
McGoldrick Lumber Co., Spokane, Wash.
McMinnville Manufacturing Co., McMinnville, Tenn.
Meadow River Lumber Co., The, Rainelle, W. Va.
Michigan Pole & Tie Co., Newberry, Mich.
Midway Lumber Co., Blountstown, Fla.
Miller Co., The A. C., Delaware, Ohio.
Miller & Yeager, Terre Haute, Ind.
Montague Millwork Co., Richmond, Va.
Morris Lumber Co., C. L., Plymouth, Ind.
Morrison, Sr., Gay, Malvern, Ark.
Morrison, Gross & Co., Erwin, W. Va.
Mowbray & Robinson Lumber Co., The, Cincinnati, Ohio.
Muhlenberg Bros., Reading, Pa.
Mundie Jensen Bourke & Havens, Chicago, Ill.
National Veneer & Lumber Co., Indianapolis, Ind.
Nelson, Albert L., St. Louis, Mo.
Newellton Hardwood Co., Inc., Newellton, La.
Nichols & Cox Lumber Co., Grand Rapids, Mich.
Nickey Brothers, Inc., Memphis, Tenn.
Northern Lumber Co., Billings, Mont.
Officer, Gwynn, Berkeley, Calif.
Oklahoma, University of, School of Architecture, Norman, Okla.
Omaha Hardwood Lumber Co., Omaha, Nebr.
Oman & Lilienthal, Chicago, Ill.
Owen Co., R. C., Hopkinsville, Ky.
Paine Lumber Co., Ltd., Oshkosh, Wis.
Pancoast, Russell T., Miami Beach, Fla.
Pardee & Curtin Lumber Co., Clarksburg, W. Va.
Pease Woodwork Co., Inc., Cincinnati, Ohio.
Peaslee, Horace W., Washington, D. C.
Pehrson, G. A., Spokane, Wash.
Pennsylvania Lumberman, The, Scranton, Pa.
Pflueger, Timothy L., San Francisco, Calif.
Phoenix Box & Lumber Co., The, Toledo, Ohio.
Piper, F. Stanley, Bellingham, Wash.
Reid, Jr., William H., Billings, Mont.
Restrick Lumber Co., Detroit, Mich.
Rindge & Rindge, Grand Rapids, Mich.
Ritter Lumber Co., W. M., Columbus, Ohio.
Rohrer Lumber Co., D. J., Clintonville, Wis.
Rose & Co., D. M., Knoxville, Tenn.
Rounds & Porter Co., Wichita, Kans.
Rowley & Associate, Charles Bacon, Cleveland, Ohio.
Rowley & Sons, Inc., Fred C., Hammond, Ind.
St. Paul & Tacoma Lumber Co., Tacoma, Wash.
San Pedro Lumber Co., Los Angeles, Calif.
Schaeffler, Joseph C., New York, N. Y.
Schirmer, R. F., New York, N. Y.
Schoeppe, Edward, Philadelphia, Pa.
Schroeder Hardwood Lumber Co., Alexander, Houston, Tex.
Shanley, Geo. H., Great Falls, Mont.
Shenk Co., Henry, Erie, Pa.
Shire, Edward I., New York, N. Y.
Sidells, Arthur F., & Ellis M. Keppel, Warren, Ohio.
Silverman & Levy, Philadelphia, Pa.
Sirrine & Co., J. E., Greenville, S. C.
Smith, Delos H., Washington, D. C.
Smith, Hinchman & Grylls, Inc., Detroit, Mich.
Snellstrom Lumber Co., Eugene, Oreg.
Specification Record, Chicago, Ill.
Stark Co., James E., Memphis, Tenn.

Stearns Coal & Lumber Co., Inc., Stearns, Ky.
Stephenson Co., I., Wells, Mich.
Stoetzel, Ralph E., Chicago, Ill.
Strable Hardwood Co., Oakland, Calif.
Strobel, John F., Rochester, N. Y.
Sumter Wood Products Co., Sumter, S. C.
Swan Lake Moulding Co., Klamath Falls, Oreg.
Sweet's Catalog Service, New York, N. Y. (In principle.)
Taylor, Ellery K., Philadelphia, Pa.
Taylor, Henry L., St. Petersburg, Fla.
Taylor, Edward Cray, & Ellis Wing Taylor, Los Angeles, Calif.
Texas Technological College, Department of Architecture and Allied Arts, Lubbock, Tex. (In principle.)
Thomas, Arthur E., Dallas, Tex.
Thomas, Glen H., Wichita, Kans.
Thompson Lumber Co., Minneapolis, Minn.
Thorne, Henry Calder, Ithaca, N. Y.
Tilden & Pepper, Philadelphia, Pa.
Trexler Lumber Co., Allentown, Pa.
Twin City Hardwood Lumber Co., St. Paul, Minn.
Vallamont Planing Mill Co., Williamsport, Pa.
Van Os & Flaxman, Shreveport, La.
Vestal Lumber & Manufacturing Co., Knoxville, Tenn.
Virginia Hardwood Lumber Co., Inc., Tazewell, Va.
Vogel, Willis A., Toledo, Ohio.
Wachter & Wachter, Toledo, Ohio.
Walker, Frank C., Chicago, Ill.
Walsh, Louis A., Waterbury, Conn. (In principle.)
Warren Lumber Co., The, Fort Morgan, Colo.
Weaver, Rudolph, Gainesville, Fla.
Weinberg, Jos. L., Cleveland, Ohio.
Welch, Carroll E., Huntington, N. Y.
Welsh Lumber Co., Memphis, Tenn.
Western Hardwood Lumber Co., Los Angeles, Calif.
White Brothers, San Francisco, Calif.
Whiting & Sons, Inc., David, Wilton, N. H.
Wiegand, Inc., Martin, Washington, D. C.
Wiles-Chipman Lumber Co., St. Louis, Mo.
Willatsen, Andrew, Seattle, Wash.
Williams, Coile & Pipino, Newport News, Va.
Williamson, E. H., Elkins, W. Va.
Willingham-Tift Lumber Co., Atlanta, Ga.
Wischmeyer, Wm. F., St. Louis, Mo.
Woltersdorf, Arthur, Chicago, Ill. (In principle.)
Wood & Son, Associates, Edward J., Clarksburg, W. Va.
Woods Lumber Co., Memphis, Tenn.
Wright & Rogvoy, Detroit, Mich. (In principle.)
Young, A. M., Seattle, Wash. (In principle.)
Zoller & Muller, New York, N. Y.

UNITED STATES GOVERNMENT

Agriculture, Department of, Washington, D. C.
Agriculture, Department of, Bureau of Agricultural Engineering, Washington, D. C. (In principle.)
Federal Works Agency, Public Buildings Administration, Washington, D. C.
Federal Works Agency, United States Housing Authority, Washington, D. C. (In principle.)
Treasury Department, Washington, D. C.
Veterans' Administration, Procurement Division, Washington, D. C.
War Department, Ordnance Department, Washington, D. C.

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4–29.	Staple porcelain (all-clay) plumbing fixtures
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33–32.	Knit underwear (exclusive of rayon).
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38–32.	Hospital rubber sheeting.

CS No.	Item
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47-34.	Marking of gold-filled and rolled-gold-plate articles other than watch cases.
48-34.	Domestic burners for Pennsylvania anthracite (underfeed type).
49-34.	Chip board, laminated chip board, and miscellaneous boards for bookbinding purposes.
50-34.	Binders board for bookbinding and other purposes.
51-35.	Marking articles made of silver in combination with gold.
52-35.	Mohair pile fabrics (100-percent mohair plain velvet, 100-percent mohair plain frieze, and 50-percent mohair plain frieze).
53-35.	Colors and finishes for cast stone.
54-35.	Mattresses for hospitals.
55-35.	Mattresses for institutions.
56-36.	Oak flooring.
57-36.	Book cloths, buckrams, and impregnated fabrics for bookbinding purposes except library bindings.
58-36.	Woven elastic fabrics for use in overalls (overall elastic webbing).
59-39.	Woven dress fabrics—testing and reporting (second edition).
60-36.	Hardwood dimension lumber.
61-37.	Wood-slat venetian blinds.
62-38.	Colors for kitchen accessories.
63-38.	Colors for bathroom accessories.
64-37.	Walnut veneers.
65-38.	Wool and part-wool fabrics.
66-38.	Marking of articles made wholly or in part of platinum.
67-38.	Marking articles made of karat gold.
68-38.	Liquid hypochlorite disinfectant, deodorant and germicide.
69-38.	Pine oil disinfectant.
70-38.	Coal tar disinfectant (emulsifying type).
71-38.	Cresylic disinfectants.
72-38.	Household insecticide (liquid spray type).
73-38.	Old growth douglas fir standard stock doors.
74-39.	Solid hardwood wall paneling.

NOTICE.—Those interested in commercial standards with a view toward accepting them as a basis of every day practice in their industry, may secure copies of the above standards, while the supply lasts, by addressing the Division of Trade Standards, National Bureau of Standards, Washington, D. C.

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